Francisco I Pugnaire

List of Publications by Year
in descending order

142	15,367	25034 57	18130 120
papers	citations	h-index	g-index

147	147	147	11644
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Higher leaf nitrogen content is linked to tighter stomatal regulation of transpiration and more efficient water use across dryland trees. New Phytologist, 2022, 235, 1351-1364.	7.3	18
2	The role of soil communities on the germination of a pioneer tree species in the Atlantic rainforest. Soil Biology and Biochemistry, 2022, 172, 108762.	8.8	2
3	Network motifs involving both competition and facilitation predict biodiversity in alpine plant communities. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	47
4	Co-ordination between xylem anatomy, plant architecture and leaf functional traits in response to abiotic and biotic drivers in a nurse cushion plant. Annals of Botany, 2021, 127, 919-929.	2.9	14
5	Azorella Cushion Plants and Aridity are Important Drivers of Soil Microbial Communities in Andean Ecosystems. Ecosystems, 2021, 24, 1576-1590.	3.4	10
6	Are complementarity effects of species richness on productivity the strongest in speciesâ€rich communities?. Journal of Ecology, 2021, 109, 2038-2046.	4.0	21
7	Species interactions involving cushion plants in high-elevation environments under a changing climate. Ecosistemas, 2021, 30, 2186.	0.4	6
8	Effects of soil microbial communities associated to different soil fertilization practices on tomato growth in intensive greenhouse agriculture. Applied Soil Ecology, 2021, 162, 103896.	4.3	11
9	Facilitation by a dwarf shrub enhances plant diversity of human-valued species at high elevations in the Himalayas of Nepal. Basic and Applied Ecology, 2021, 54, 23-36.	2.7	10
10	The paradox of forbs in grasslands and the legacy of the mammoth steppe. Frontiers in Ecology and the Environment, 2021, 19, 584-592.	4.0	26
11	Species identity improves soil respiration predictions in a semiarid scrubland. Geoderma, 2020, 363, 114153.	5.1	16
12	Azorella compacta : survival champions in extreme, highâ€elevation environments. Ecosphere, 2020, 11, e03031.	2.2	6
13	Warming enhances growth but does not affect plant interactions in an alpine cushion species. Perspectives in Plant Ecology, Evolution and Systematics, 2020, 44, 125530.	2.7	13
14	Complementarity in nurse plant systems: soil drives community composition while microclimate enhances productivity and diversity. Plant and Soil, 2020, 450, 385-396.	3.7	10
15	Facilitation mediates species presence beyond their environmental optimum. Perspectives in Plant Ecology, Evolution and Systematics, 2019, 38, 24-30.	2.7	11
16	Climate change effects on plant-soil feedbacks and consequences for biodiversity and functioning of terrestrial ecosystems. Science Advances, 2019, 5, eaaz1834.	10.3	245
17	Functional responses of four Sahelian tree species to resource availability. Flora: Morphology, Distribution, Functional Ecology of Plants, 2019, 254, 181-187.	1.2	2
18	Soil microâ€organisms and competitive ability of a tussock grass species in a dry ecosystem. Journal of Ecology, 2019, 107, 1215-1225.	4.0	19

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19	Plant community changes after land abandonment control CO2 balance in a dry environment. Plant and Soil, 2018, 425, 253-264.	3.7	5
20	Plant life history stage and nurse age change the development of ecological networks in an arid ecosystem. Oikos, 2018, 127, 1390-1397.	2.7	16
21	Facilitation influences patterns of perennial species abundance and richness in a subtropical dune system. AoB PLANTS, 2018, 10, ply017.	2.3	40
22	Factors controlling shrub encroachment in subtropical montane systems. Applied Vegetation Science, 2018, 21, 190-197.	1.9	9
23	Water Shortage Drives Interactions Between Cushion and Beneficiary Species Along Elevation Gradients in Dry Himalayas. Journal of Geophysical Research G: Biogeosciences, 2018, 123, 226-238.	3.0	7
24	Shrub facilitation drives tree establishment in a semiarid fogâ€dependent ecosystem. Applied Vegetation Science, 2018, 21, 113-120.	1.9	10
25	Shrubs mediate forest start-up and patch dynamics in a semiarid landscape. Perspectives in Plant Ecology, Evolution and Systematics, 2018, 34, 140-149.	2.7	1
26	Carbon fluxes from a temperate rainforest site in southern South America reveal a very sensitive sink. Ecosphere, 2018, 9, e02193.	2.2	15
27	The balance of canopy and soil effects determines intraspecific differences in foundation speciesâ€™ effects on associated plants. Functional Ecology, 2018, 32, 2253-2263.	3.6	19
28	Mimicking a rainfall gradient to test the role of soil microbiota for mediating plant responses to drier conditions. Oikos, 2018, 127, 1776-1786.	2.7	17
29	Leaf Î´13C as an indicator of water availability along elevation gradients in the dry Himalayas. Ecological Indicators, 2018, 94, 266-273.	6.3	20
30	Warming effects on the colonization of a coastal ecosystem by Furcraea foetida (Asparagaceae), a clonal invasive species. Plant Ecology, 2018, 219, 813-821.	1.6	2
31	Disentangling plant establishment in sandy coastal systems: biotic and abiotic factors that determine Allagoptera arenaria (Arecaceae) germination. Acta Botanica Brasilica, 2018, 32, 12-19.	0.8	9
32	Functional groups of Sahelian trees in a semiarid agroforestry system of Senegal. Journal of Plant Ecology, 2017, , rtw140.	2.3	1
33	A traitâ€based approach to understand the consequences of specific plant interactions for community structure. Journal of Vegetation Science, 2017, 28, 696-704.	2.2	25
34	Disentangling aboveâ€and belowâ€ground facilitation drivers in arid environments: the role of soil microorganisms, soil properties and microhabitat. New Phytologist, 2017, 216, 1236-1246.	7.3	40
35	Symbiotic soil fungi enhance ecosystem resilience to climate change. Global Change Biology, 2017, 23, 5228-5236.	9.5	63
36	The shift from plantâ€“plant facilitation to competition under severe water deficit is spatially explicit. Ecology and Evolution, 2017, 7, 2441-2448.	1.9	45

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37	Plant-plant competition outcomes are modulated by plant effects on the soil bacterial community. Scientific Reports, 2017, 7, 17756.	3.3	66
38	Functional Plant Types Drive Plant Interactions in a Mediterranean Mountain Range. Frontiers in Plant Science, 2016, 7, 662.	3.6	21
39	Does the stressâ€gradient hypothesis hold water? Disentangling spatial and temporal variation in plant effects on soil moisture in dryland systems. Functional Ecology, 2016, 30, 10-19.	3.6	64
40	Facilitation in communities: underlying mechanisms, community and ecosystem implications. Functional Ecology, 2016, 30, 3-9.	3.6	94
41	Contribution of co-occurring shrub species to community richness and phylogenetic diversity along an environmental gradient. Perspectives in Plant Ecology, Evolution and Systematics, 2016, 19, 30-39.	2.7	34
42	Mutual positive effects between shrubs in an arid ecosystem. Scientific Reports, 2015, 5, 14710.	3.3	25
43	Different mycorrhizal fungal strains determine plant community response to nitrogen and water availability. Journal of Plant Nutrition and Soil Science, 2015, 178, 146-154.	1.9	8
44	Benefactor and allelopathic shrub species have different effects on the soil microbial community along an environmental severity gradient. Soil Biology and Biochemistry, 2015, 88, 48-57.	8.8	44
45	The effects of foundation species on community assembly: a global study on alpine cushion plant communities. Ecology, 2015, 96, 2064-2069.	3.2	53
46	Disentangling direct and indirect effects of a legume shrub on its understorey community. Oikos, 2015, 124, 1251-1262.	2.7	53
47	Phylogenetic distance among beneficiary species in a cushion plant species explains interaction outcome. Oikos, 2015, 124, 1354-1359.	2.7	17
48	Relationships between specific leaf area and leaf composition in succulent and non-succulent species of contrasting semi-desert communities in south-eastern Spain. Journal of Arid Environments, 2015, 118, 69-83.	2.4	20
49	Effects of changes in rainfall amount and pattern on root dynamics in an arid shrubland. Journal of Arid Environments, 2015, 114, 49-53.	2.4	22
50	No evidence of facilitation collapse in the Tibetan plateau. Journal of Vegetation Science, 2015, 26, 233-242.	2.2	39
51	The context dependence of beneficiary feedback effects on benefactors in plant facilitation. New Phytologist, 2014, 204, 386-396.	7.3	37
52	Consequences of facilitation: one plant's benefit is another plant's cost. Functional Ecology, 2014, 28, 500-508.	3.6	55
53	A global analysis of bidirectional interactions in alpine plant communities shows facilitators experiencing strong reciprocal fitness costs. New Phytologist, 2014, 202, 95-105.	7.3	79
54	Facilitative plant interactions and climate simultaneously drive alpine plant diversity. Ecology Letters, 2014, 17, 193-202.	6.4	274

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55	Interactions among soil, plants, and microorganisms drive secondary succession in a dry environment. Soil Biology and Biochemistry, 2014, 78, 298-306.	8.8	152
56	Water uptake and redistribution during drought in a semiarid shrub species. Functional Plant Biology, 2014, 41, 812.	2.1	12
57	Phenological and reproductive responses of a semiarid shrub to pulsed watering. Plant Ecology, 2014, 215, 769-777.	1.6	11
58	Alpine cushion plants inhibit the loss of phylogenetic diversity in severe environments. Ecology Letters, 2013, 16, 478-486.	6.4	151
59	Nucleation-driven regeneration promotes post-fire recovery in a Chilean temperate forest. Plant Ecology, 2013, 214, 765-776.	1.6	61
60	A role for belowâ€ground biota in plantâ€“plant facilitation. Journal of Ecology, 2013, 101, 1420-1428.	4.0	66
61	Direct and indirect interactions coâ€determine species composition in nurse plant systems. Oikos, 2013, 122, 1371-1379.	2.7	76
62	Soil microbial community under a nurse-plant species changes in composition, biomass and activity as the nurse grows. Soil Biology and Biochemistry, 2013, 64, 139-146.	8.8	102
63	Variability in functional traits mediates plant interactions along stress gradients. Journal of Ecology, 2013, 101, 753-762.	4.0	177
64	Trade-offs between maintenance of ecosystem services and socio-economic development in rural mountainous communities in southern Spain: A dynamic simulation approach. Journal of Environmental Management, 2013, 131, 280-297.	7.8	61
65	Hydraulic lift promotes selective root foraging in nutrient-rich soil patches. Functional Plant Biology, 2012, 39, 804.	2.1	38
66	Foundation species influence traitâ€based community assembly. New Phytologist, 2012, 196, 824-834.	7.3	150
67	Impacts of changing rainfall patterns on mycorrhizal status of a shrub from arid environments. European Journal of Soil Biology, 2012, 50, 64-67.	3.2	33
68	Water release through plant roots: new insights into its consequences at the plant and ecosystem level. New Phytologist, 2012, 193, 830-841.	7.3	296
69	Arbuscular mycorrhizal fungi host preference and site effects in two plant species in a semiarid environment. Applied Soil Ecology, 2011, 48, 313-317.	4.3	62
70	Belowground zone of influence in a tussock grass species. Acta Oecologica, 2011, 37, 284-289.	1.1	26
71	Positive plant interactions in the Iberian Southeast: Mechanisms, environmental gradients, and ecosystem function. Journal of Arid Environments, 2011, 75, 1310-1320.	2.4	115
72	Climatic change and rainfall patterns: Effects on semi-arid plant communities of the Iberian Southeast. Journal of Arid Environments, 2011, 75, 1302-1309.	2.4	149

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73	The role of hydraulic lift on seedling establishment under a nurse plant species in a semi-arid environment. Perspectives in Plant Ecology, Evolution and Systematics, 2011, 13, 181-187.	2.7	69
74	Does shelter enhance early seedling survival in dry environments? A test with eight Mediterranean species. Applied Vegetation Science, 2011, 14, 31-39.	1.9	54
75	A field test of the stress-gradient hypothesis along an aridity gradient. Journal of Vegetation Science, 2011, 22, 818-827.	2.2	153
76	Shrubs influence arbuscular mycorrhizal fungi communities in a semi-arid environment. Soil Biology and Biochemistry, 2011, 43, 682-689.	8.8	89
77	Climatic drivers of plantâ€“plant interactions and diversity in alpine communities. Alpine Botany, 2011, 121, 63-70.	2.4	47
78	Plant Neighbour Identity Matters to Belowground Interactions under Controlled Conditions. PLoS ONE, 2011, 6, e27791.	2.5	27
79	Hydraulic lift and tolerance to salinity of semiarid species: consequences for species interactions. Oecologia, 2010, 162, 11-21.	2.0	63
80	Hydraulic lift through transpiration suppression in shrubs from two arid ecosystems: patterns and control mechanisms. Oecologia, 2010, 163, 855-865.	2.0	42
81	Hydraulic lift: soil processes and transpiration in the Mediterranean leguminous shrub Retama sphaerocarpa (L.) Boiss. Plant and Soil, 2010, 329, 447-456.	3.7	74
82	Land-use changes and carbon sequestration through the twentieth century in a Mediterranean mountain ecosystem: Implications for land management. Journal of Environmental Management, 2010, 91, 2688-2695.	7.8	70
83	Woody species of a semi-arid community are only moderately resistant to cavitation. Functional Plant Biology, 2010, 37, 828.	2.1	35
84	The role of arbuscular mycorrhizae in primary succession: differences and similarities across habitats. Web Ecology, 2010, 10, 50-57.	1.6	20
85	Rethinking species selection for restoration of arid shrublands. Basic and Applied Ecology, 2009, 10, 640-647.	2.7	68
86	Variability in amount and frequency of water supply affects roots but not growth of arid shrubs. Plant Ecology, 2009, 204, 261-270.	1.6	80
87	Ontogenetic shifts in interactions of two dominant shrub species in a semiâ€arid coastal sand dune system. Journal of Vegetation Science, 2009, 20, 535-546.	2.2	85
88	Do changes in rainfall patterns affect semiarid annual plant communities?. Journal of Vegetation Science, 2009, 20, 269-276.	2.2	86
89	Species Identity and Water Availability Determine Establishment Success Under the Canopy of Retama sphaerocarpa Shrubs in a Dry Environment. Restoration Ecology, 2009, 17, 900-907.	2.9	38
90	Response of a Mediterranean semiarid community to changing patterns of water supply. Perspectives in Plant Ecology, Evolution and Systematics, 2009, 11, 255-266.	2.7	55

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91	Abiotic conditions, neighbour interactions, and the distribution of Stipa tenacissima in a semiarid mountain range. Journal of Arid Environments, 2009, 73, 1084-1089.	2.4	12
92	Donâ€™t Diss Integration: A Comment on Ricklefsâ€™s Disintegrating Communities. American Naturalist, 2009, 174, 919-927.	2.1	83
93	Mediterranean-climate oak savannas: the interplay between abiotic environment and species interactions. Web Ecology, 2009, 9, 30-43.	1.6	66
94	Facilitation in plant communities: the past, the present, and the future. Journal of Ecology, 2008, 96, 18-34.	4.0	788
95	Patch structure dynamics and mechanisms of cyclical succession in a Patagonian steppe (Argentina). Journal of Arid Environments, 2008, 72, 1552-1561.	2.4	42
96	Rooting depth and soil moisture control Mediterranean woody seedling survival during drought. Functional Ecology, 2007, 21, 489-495.	3.6	374
97	Early root growth plasticity in seedlings of three Mediterranean woody species. Plant and Soil, 2007, 296, 103-113.	3.7	74
98	The role of nurse plants in the restoration of degraded environments. Frontiers in Ecology and the Environment, 2006, 4, 196-202.	4.0	511
99	Colonization processes in semi-arid Mediterranean old-fields. Journal of Arid Environments, 2006, 65, 591-603.	2.4	65
100	Do biotic interactions shape both sides of the humped-back model of species richness in plant communities?. Ecology Letters, 2006, 9, 767-773.	6.4	517
101	The effect of initial biomass in manipulative experiments on plants. Functional Ecology, 2006, 20, 1-3.	3.6	12
102	Evolutionary changes in correlations among functional traits in <i>Ceanothus</i> in response to Mediterranean conditions. Web Ecology, 2006, 6, 17-26.	1.6	10
103	Plant interactions govern population dynamics in a semi-arid plant community. Journal of Ecology, 2005, 93, 978-989.	4.0	253
104	Community structure and positive interactions in constraining environments. Oikos, 2005, 111, 437-444.	2.7	370
105	The importance of importance. Oikos, 2005, 109, 63-70.	2.7	289
106	LINKING PATTERNS AND PROCESSES IN ALPINE PLANT COMMUNITIES: A GLOBAL STUDY. Ecology, 2005, 86, 1395-1400.	3.2	203
107	Invasion of Agave species (Agavaceae) in south-east Spain: invader demographic parameters and impacts on native species. Diversity and Distributions, 2004, 10, 493-500.	4.1	32
108	Soil as a mediator in plantâ€plant interactions in a semiâ€arid community. Journal of Vegetation Science, 2004, 15, 85-92.	2.2	225

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109	Rethinking plant community theory. Oikos, 2004, 107, 433-438.	2.7	479
110	MEASURING PLANT INTERACTIONS: A NEW COMPARATIVE INDEX. Ecology, 2004, 85, 2682-2686.	3.2	694
111	Soil as a mediator in plant-plant interactions in a semi-arid community. Journal of Vegetation Science, 2004, 15, 85.	2.2	21
112	Shrub spatial aggregation and consequences for reproductive success. Oecologia, 2003, 136, 296-301.	2.0	107
113	The Ratio of Leaf to Total Photosynthetic Area Influences Shade Survival and Plastic Response to Light of Green-stemmed Leguminous Shrub Seedlings. Annals of Botany, 2003, 91, 577-584.	2.9	40
114	Positive interactions among alpine plants increase with stress. Nature, 2002, 417, 844-848.	27.8	1,821
115	Title is missing!. Plant and Soil, 2002, 240, 343-352.	3.7	79
116	Title is missing!. Plant and Soil, 2002, 240, 253-262.	3.7	38
117	Title is missing!. Fluid Dynamics, 2002, 37, 970-982.	0.9	4
118	Variability of inorganic nutrient concentrations in leaves. New Phytologist, 2001, 150, 506-507.	7.3	19
119	Changes in plant interactions along a gradient of environmental stress. Oikos, 2001, 93, 42-49.	2.7	367
120	Title is missing!. Plant Ecology, 2000, 146, 105-115.	1.6	9
121	Seed Bank and Understorey Species Composition in a Semi-arid Environment: The Effect of Shrub Age and Rainfall. Annals of Botany, 2000, 86, 807-813.	2.9	166
122	Stress resistance strategy in an arid land shrub: interactions between developmental instability and fractal dimension. Journal of Arid Environments, 2000, 45, 325-336.	2.4	43
123	Photosynthetic rate and canopy development in the drought-deciduous shrub Anthyllis cytisoides L.. Journal of Arid Environments, 2000, 46, 79-91.	2.4	31
124	Diurnal and seasonal changes in cladode photosynthetic rate in relation to canopy age structure in the leguminous shrub Retama sphaerocarpa. Functional Ecology, 1999, 13, 640-649.	3.6	22
125	Title is missing!. Plant Ecology, 1999, 145, 327-339.	1.6	55
126	Tradeoffs Between Irradiance Capture and Avoidance in Semi-arid Environments Assessed with a Crown Architecture Model. Annals of Botany, 1999, 83, 459-469.	2.9	127

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127	Spatial pattern inAnthyllis cytisoidesshrubland on abandoned land in southeastern Spain. Journal of Vegetation Science, 1997, 8, 627-634.	2.2	63
128	Mechanisms of interaction between a leguminous shrub and its understorey in a semi-arid environment. Ecography, 1997, 20, 175-184.	4.5	148
129	Title is missing!. , 1997, 131, 207-213.		30
130	Effect of the canopy of Retama sphaerocarpa on its understorey in a semiarid environment. Functional Ecology, 1997, 11, 425-431.	3.6	161
131	Spatial patterns in a two-tiered semi-arid shrubland in southeastern Spain. Journal of Vegetation Science, 1996, 7, 527-534.	2.2	135
132	Facilitation and Succession under the Canopy of a Leguminous Shrub, Retama sphaerocarpa, in a Semi-Arid Environment in South-East Spain. Oikos, 1996, 76, 455.	2.7	281
133	Facilitation between Higher Plant Species in a Semiarid Environment. Ecology, 1996, 77, 1420-1426.	3.2	410
134	An investigation of rooting depth of the semiarid shrub Retama sphaerocarpa (L.) Boiss. by labelling of ground water with a chemical tracer. Journal of Hydrology, 1996, 177, 23-31.	5.4	99
135	Comparative Physiology and Growth of Two Perennial Tussock Grass Species in a Semi-Arid Environment. Annals of Botany, 1996, 77, 81-86.	2.9	68
136	Response of the Tussock Grass Stipa tenacissima to Watering in a Semi-Arid Environment. Functional Ecology, 1996, 10, 265.	3.6	80
137	A comparison of direct and indirect methods for measuring leaf and surface areas of individual bushes. Plant, Cell and Environment, 1995, 18, 1332-1340.	5.7	39
138	Seed production and dispersal in the semi-arid tussock grassStipa tenacissimaL. during masting. Journal of Arid Environments, 1995, 31, 55-65.	2.4	46
139	Controls over Nutrient Resorption from Leaves of Evergreen Mediterranean Species. Ecology, 1993, 74, 124-129.	3.2	156
140	Evolution of Suites of Traits in Response to Environmental Stress. American Naturalist, 1993, 142, S78-S92.	2.1	737
141	Environmental and physiological factors governing nutrient resorption efficiency in barley. Oecologia, 1992, 90, 120-126.	2.0	66
142	Nutritional adaptations of caper shrub(Capparis OvataDesf.) to environmental stress. Journal of Plant Nutrition, 1991, 14, 151-161.	1.9	19